procedures. The second day of training is the cell infusion day. The nurse reinforces teaching with the patient and family and assists the physician with the cell infusion. The third day consists of review of the infusion procedure, complications review and competency completion. The clinical nurse specialist or instructor will serve as a resource to the nurse during the next transplant assignment. Currently, more than half the nurses are trained to care for transplant patients. The nurses report satisfaction with the training.

TRANSPLANT NURSING ORAL

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STANDARDIZING CENTRAL VENOUS LINE CARE IN INPATIENT PEDIATRIC HEMATOPOIETIC STEM CELL TRANSPLANT RECIPIENTS: DOES IT MAKE A DIFFERENCE IN REDUCING CATHETER RELATED BLOOD STREAM INFECTION RATES?

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Central venous catheter related blood stream infections (CRBSI) increase morbidity and mortality in pediatric hematopoietic stem cell transplant (HSCT) recipients. There are limited data in the pediatric HSCT population regarding the incidence of CRBSI. Studies in adult oncology and HSCT patients have reported the average rate to be 2.5 CRBSI per 1000 patient-days. We hypothesized that adherence to evidence-based practices shown to reduce CRBSI in short term central venous lines (CVLs) would also reduce CRBSI in long term CVLs. We report the preliminary results of standardizing CVL care and the resultant effect on the incidence of CRBSI. A multidisciplinary team reviewed current policies and procedures for long term CVL care and updated these according to evidence-based practice derived from CDC and Child Health Corporation of America. From January – May 2007, "the education phase", inpatient HSCT RNs were in-serviced on correct technique for dressing changes and for drawing blood from CVLs. Additional practice changes included the technique used to disinfect the catheter hub prior to line entry and limiting daily line entries. From February-May, staff received booster education via face-to-face meetings and weekly e-mails. From May-September 2007, "the intervention phase", observations of inpatient nurses were performed by 4 nurse practitioners and compliance was scored based on set criteria. CRBSI was defined as a positive blood culture ≥ 48 hours after admission treated with antimicrobials. CRBSI rates were assessed per 1000 patient-days. In 2006, prior to this initiative, the average CRBSI rate in pediatric HSCT patients was 6.07 CRBSI per 1000 patient-days (range 0–8.97). During the education phase, the average CRBSI rate was 8.15 (2.49–13.22). Improved compliance with desired practices related to dressing changes (n = 34) and blood drawing (n = 79) is shown below. During the intervention period, the average CRBSI rate was 0.67 per 1000 patient days (0–3.33). Education alone did not impact CRBSI rates. Only when direct observations of CVL care were implemented did the rate of CRBSI significantly decrease. The multidisciplinary team is currently monitoring sustained adherence to practice changes, collecting CRBSI rates in pediatric HSCT outpatients, developing a plan to increase patient/family and home care education, and assessing risk factors for CRBSI.

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DOMAINS OF DECISION MAKING IN QUATERNARY HSCT RESEARCH

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Purpose: A broad range of literature exists detailing the informed-consent process, with much of it evaluating the delivery, comprehension and long-term recall of information, as well as issues of regulatory significance and compliance. Limited attention, however, has been paid to the elements beyond information and regulatory compliance that influence decision-making in cancer research centers. This study examined decision-making in an HSCT quaternary cancer research center (QCRC)from the patient/family perspective. One study objective was to describe how individuals treated at a quaternary cancer research center make decisions about participating in research. a. What/who do patients identify as influential in forming the decision to participate in research? b. Where/when do research participants identify themselves as having made the decision? What are the reasons for the decision? **Rationale:** This exploratory project postulated clinical decision making in a QCRC is a significantly different process than that occurring in the standard medical setting where medical outcome information is more abundant, other alternatives exist, and research participants, in general, are making decisions in locations close to their homes. Given the medical condition and the often advanced stage of the disease in such instances, it is difficult to assure that these research participation decisions are free of coercion and are voluntarily made. **Methods:** This was a descriptive qualitative study enrolling 25 HSCT patients and family members, (N = 47) who had over time, 3 semi-structured, audio-taped interviews with investigators: pre-HSCT (but following decision to participate in research protocol for HSCT) and subsequently on days 80 and 360 post-HSCT. The study began in June 2004 and the last interview was in December 2006. Interviews were transcribed and analyzed using HyperResearch® software. **Findings:** Analysis of the data revealed participants identified distinct characteristics specific to the decision making processes in a QCRC for a HSCT. The timing of the decision, the reasoning for the decision, and the influences exerted upon that decision were articulated. Additional findings included clarification of general needs for cancer decision making throughout the illness trajectory. Recommendations will be offered for improving informed consent process in cancer research settings in QCRC, secondary or tertiary centers. **Funding:** NINR National Institute of Research R21NR00947.

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EXERCISE IN PATIENTS RECEIVING INTENSIVE CANCER THERAPY: RESULTS FROM A FEASIBILITY STUDY

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Patients receiving hematopoietic stem cell transplantation may experience considerable reductions in physical activity and deterioration of their performance status. Exercise has been identified as an effective intervention to improve physical activity and muscle strength. Little is known, however, regarding the appropriate intensity and timing of an exercise intervention in this population. The purpose of this study was to determine the feasibility and acceptability of a strength training intervention in patients receiving hematopoietic stem cell transplantation (HSCT). The convenience sample (n = 10) included patients receiving HSCT drawn from an academic medical center. Design: This study used a prospective, repeated measures design. The home-based strength training intervention was introduced in the hospital and continued for six weeks following discharge from the hospital. Dependent variables included physical activity, muscle strength, fatigue, perceived health status, and quality of life. These variables were measured prior to admission to the hospital for HSCT, on day 8 following HSCT, and six weeks following discharge from the hospital. Most subjects (n = 7) were able to implement the strength training intervention using elastic resistance bands. More patients adhered to the exercise prescription in weeks 5 and 6 compared to weeks 1 and 2. The patient's ability to adhere to the exercise prescription required weekly assessments, particularly in the initial weeks following discharge from the hospital. Physical activity significantly declined following the HSCT then improved six weeks following discharge from the hospital ($p < .05$). Hand grip muscle strength significantly declined six weeks following hospital discharge compared to baseline levels ($p < .05$). The findings suggest that it is feasible to conduct an exercise intervention in most patients receiving intensive cancer therapy. Subjects required more frequent monitoring of their exercise prescription due to their changing physical condition. Physical activity levels improved following the exercise intervention while hand grip muscle strength did not. Phase 2 of this study is currently underway comparing strength training to usual activity on physical activity, muscle strength, fatigue, health status perceptions, and quality of life.